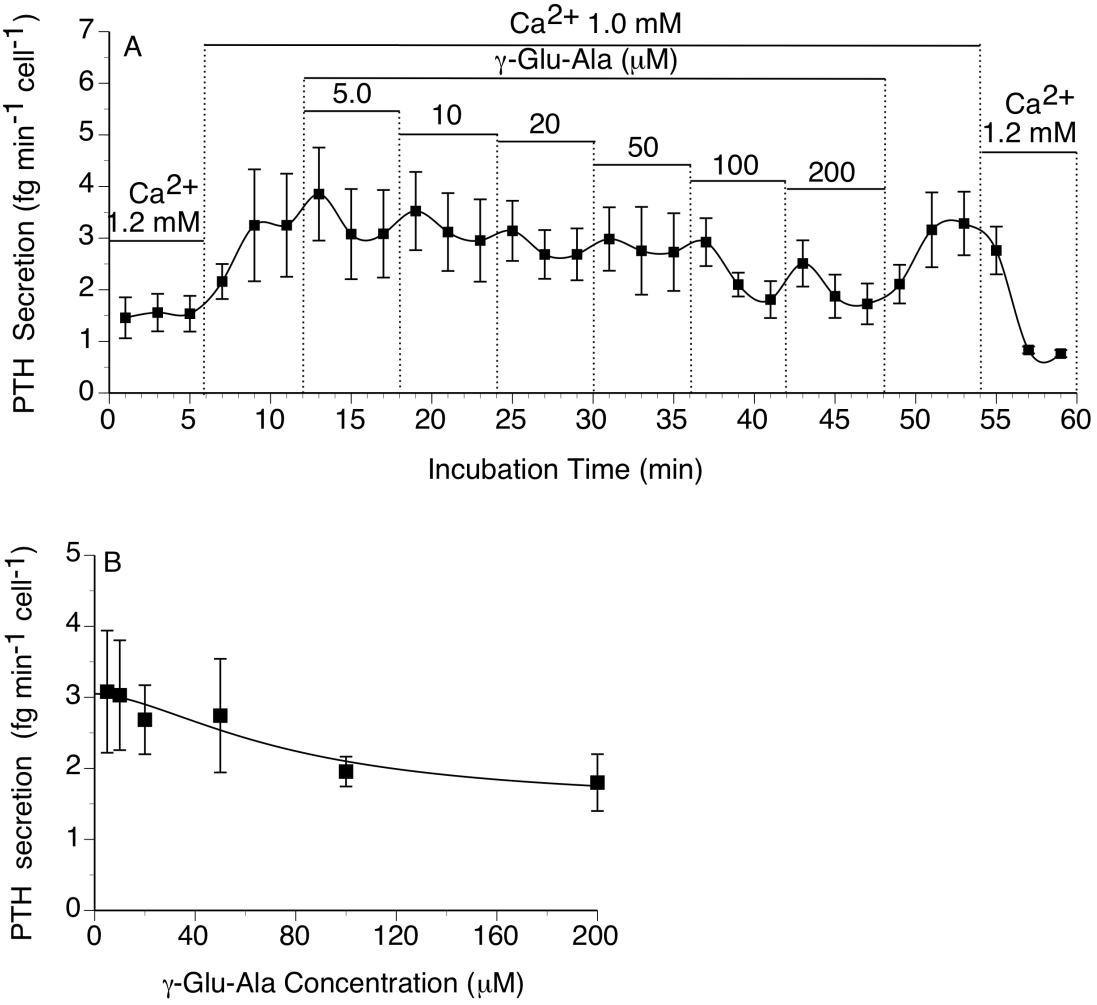
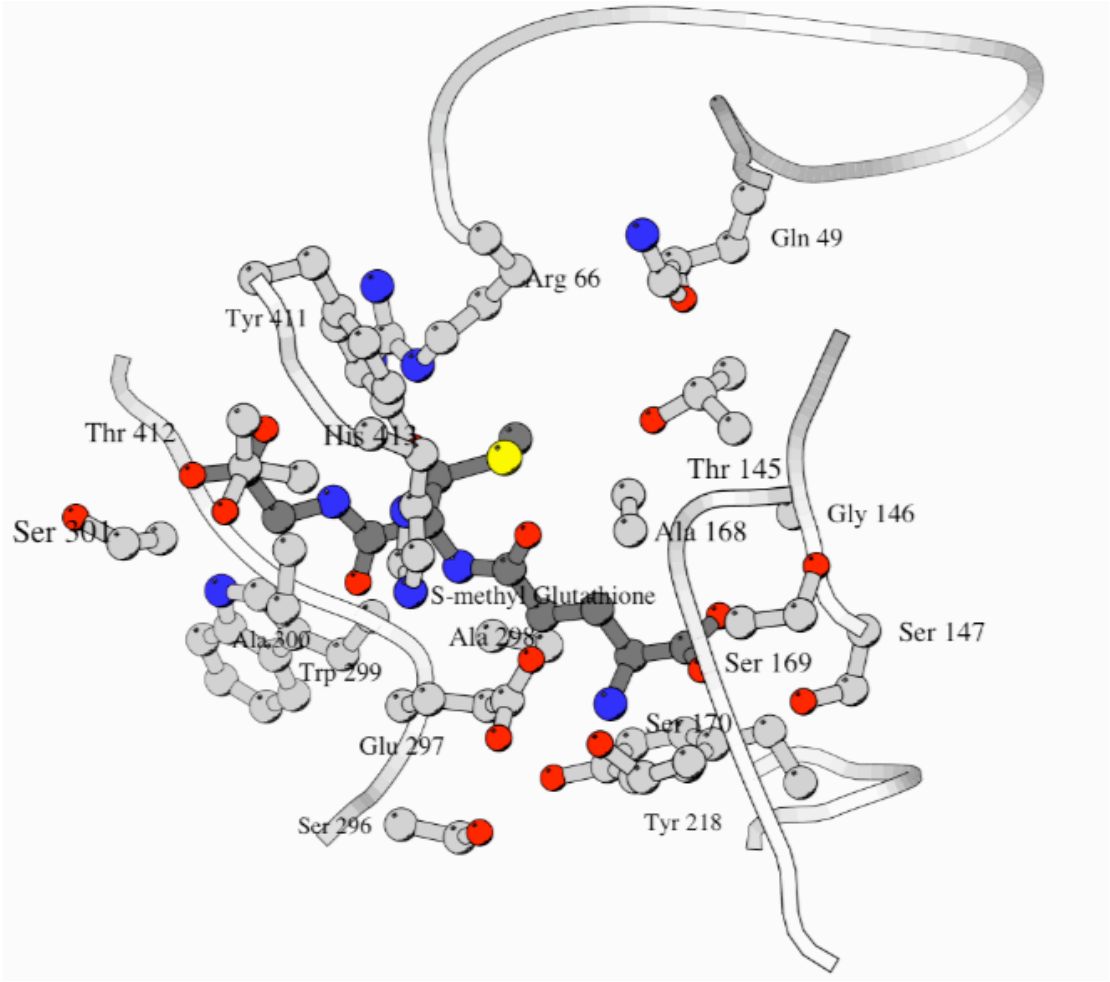
Supplemental Figure 1



Supplemental Figure 2



SUPPLEMENTAL FIGURE LEGENDS

Supplemental Fig. 1.

Effect of γ-Glu-Ala on PTH secretion from normal human parathyroid cells

Normal human parathyroid cells were prepared by collagenase digestion and loaded into a perifusion column for the analysis of acute changes in PTH secretion as described in *Experimental*. (A) The effect of step-wise increases in γ-Glu-Ala concentration (5 – 200 μM) on PTH secretion in the presence of 1 mM Ca^{2+}_o. The data are means ± SEM from three experiments. (B) Concentration-response curve demonstrating the inhibitory effect of γ-Glu-Ala on PTH secretion; the data were derived from the time-course experiments shown in (A) above.

Supplemental Fig. 2.

Representation of predicted γ-glutamyl peptide/L-amino acid binding site in the CaR VFT domain

Modelling of the closed state of a single human CaR (GenBank: AAI12237.1) VFT domain was undertaken using the rat mGlu3 as template (PDB ID 2E4U; 1) and *MODELLER* software (2), on the graphical interface *Discovery Studio* (v1.7, Accelrys, San Diego, CA, USA) guided by multiple sequence alignments. The γ–glutamyl peptide, S-methylglutathione (SMG; dark gray) is shown docked in the putative amino acid/γ-glutamyl peptide ligand binding site. Note the proximity between the docked SMG molecule and residues T145 and S170. The Figure was prepared using *MOLSCRIPT* software (3). 1. Kraulis PJ (1991) MOLSCRIPT: a program to produce both detailed and schematic plots of protein structures J. Appl. Cryst. 24, 946-950; 2. Muto T, Tsuchiya D, Morikawa K, Jingami H (2007) Structures of the extracellular regions of the group II/III metabotropic glutamate receptors Proc. Natl. Acad. Sci. USA 104, 3759-3764; 3. Sali A, Blundell TL (1993) Comparative protein modeling by satisfaction of spatial restraints J. Mol. Biol. 234, 779-815.